A Tribute to Torrence Parsons

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I first met my friend and co-worker Tory Parsons in the autumn of 1972 when I first visited Penn State University. We had several long mathematical discussions and I visited him at his home and met his "boss" and "epsilons" which, if I remember right, were quite small at that time.

We shared a common interest in graph theory in general and in Ramsey theory in particular. He wrote a nice survey article, "Ramsey Graph Theory", in selected topics of graph theory in 1979. In our work with Faudree, Rousseau and Schelp we several times used his results. Besides Ramsey theory he worked on long cycles, universal graphs and block designs. He shared with me his love of traveling and his liking of collaboration. He liked to give lectures at meetings — it is very sad that he died just before his lecture tour to Australia and New Zealand. (He was supposed to lecture in May, 1987 to the Australian and New Zealand Mathematical Society). In 1985 he lectured on graph theory in Dubrovnick, Yugoslavia. He visited many of the meetings in the U.S. and our joint paper was started at such a meeting. He was also very fond of outdoor activities, perhaps he overdid this, since it seems that he died after a marathon run of ventricular fabrillation. In any case, his untimely death is a great loss to Mathematics, his many friends, and his family.

Now I write a few words about our joint paper which will soon appear in the European Journal of Combinatorics (Intersection graphs for families of balls in $R^{(n)}$ (P. Erdös, C. Godsil, S. G. Krantz and T. Parsons).

Let F_n be the family of balls in n-dimensional Euclidean R^n. Denote by G_n the graphs which can be represented as the interaction graphs of sets in F_n. By $G_{n,q}$ we denote the set of graphs which can be represented by balls in F_n so that B_1 and B_2 are adjacent if

$$\mathrm{Vol}[B \cap B'] \leq (1 - \varepsilon) \min(\mathrm{Vol}[B], \mathrm{Vol}[B'])$$

We prove among other things that every graph in $G_{n,e}$ has a vertex of degree at most $d = d(n, e)$. Also, we show that every graph G in $G(n)$ has a vertex X whose neighborhood contains no independent set of size $\geq m = m(n)$. This im-

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plies that the complete bipartite graph $K(m, m)$ is not in $G(n)$ for $m > m(n)$. We could not determine the exact values of $m(n)$ and $d(n, e)$. We planned to work on this and other problems in the future but as is well known "the best laid plans of mice and men . . .", and unfortunately this applies to mathematicians too.

The mathematics department of his university started a scholarship fund in his memory. My mother used to say children become letters, and mathematicians become collected papers and scholarship funds. Tory will be long remembered.